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The Mineral Industry of Rhode Island

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The Mineral Industry of Rhode Island

This chapter has been prepared under a Memorandum of Understanding between the Bureau of Mines, U.S. Department of the Interior, and the Rhode Island Department of Environmental Management for collecting information on all nonfuel minerals.

By Donald K. Harrison[1]

The value of nonfuel mineral production in 1986 was $14.2 million. This all-time high value resulted from the continuing building boom in the Northeast, which began after the last recession, coupled with higher unit value prices. Sand and gravel and crushed stone were the only two mineral commodities produced. Although there were only about 200 workers engaged in mining in 1986, nearly 17,200 others worked in mineral-dependent construction and another 7,100 were employed in manufacturing stone, clay, glass, and primary metal products. The State ranked 49th in total mineral value.

Table 1.—Nonfuel mineral production in Rhode Island[1]

Mineral	1984		1985		1986	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
Sand and gravel:						
Construction thousand short tons	1,483	$5,282	e1,200	e$4,600	2,269	$8,252
Industrial do.	W	W	W	W	22	143
Stone (crushed) do.	e1,000	e5,800	e2 1,135	e2 7,016	e 2 1,000	e 2 5,700
Combined value of other industrial minerals and values indicated by symbol W	XX	r466	XX	576	XX	101
Total	XX	r11,548	XX	12,192	XX	14,196

eEstimated. rRevised. W Withheld to avoid disclosing company proprietary data, value included with "Combined value" figure. XX Not applicable.

[1]Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

[2]Excludes certain stones, value included with "Combined value" figure.

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Table 2.—Nonfuel minerals produced in Rhode Island in 1985, by county[1]

County	Minerals produced in order of value
Newport	Stone (crushed).
Providence	Stone (crushed), sand (industrial).
Undistributed[2]	Sand and gravel (construction), gem stones.

[1]No production of nonfuel mineral commodities was reported for regions not listed.
[2]Data not available by counties for minerals listed.

Table 3.—Indicators of Rhode Island business activity

		1984[r]	1985	1986[p]
Employment and labor force, annual average:				
Population	thousands	960	967	975
Total civilian labor force	do.	490	500	510
Unemployment	percent	5.3	4.9	4.0
Employment (nonagricultural):				
Mining total	thousands	0.2	0.1	0.2
Manufacturing total	do.	121.7	119.2	119.4
Primary metal industries	do.	6.2	5.7	5.4
Stone, clay, and glass products	do.	1.9	1.7	1.7
Chemicals and allied products	do.	3.1	3.1	3.1
Construction	do.	13.3	15.2	17.0
Transportation and public utilities	do.	13.5	13.9	14.7
Wholesale and retail trade	do.	88.6	94.6	99.0
Finance, insurance, real estate	do.	22.7	23.6	24.9
Services	do.	99.0	105.0	109.1
Government and government enterprises	do.	57.4	57.7	58.0
Total[1]	do.	416.4	429.2	442.1
Personal income:				
Total	millions	$12,475	$13,208	$14,213
Per capita		$12,993	$13,682	$14,579
Hours and earnings:				
Total average weekly hours, production workers		40.9	40.2	40.5
Total average hourly earnings, production workers		$7.3	$7.6	$7.9
Earnings by industry:[2]				
Farm income	millions	$35	$50	$48
Nonfarm	do.	$8,427	$9,079	$9,877
Mining total	do.	$21	$29	$30
Nonmetallic minerals except fuels	do.	$2	$3	$3
Oil and gas extraction	do.	$18	$26	$26
Manufacturing total	do.	$2,524	$2,542	$2,659
Primary metal industries	do.	$202	$150	$147
Stone, clay, and glass products	do.	$51	$51	$55
Chemicals and allied products	do.	$85	$86	$90
Petroleum and coal products	do.	$5	$8	$7
Construction	do.	$423	$490	$577
Transportation and public utilities	do.	$367	$388	$422
Wholesale and retail trade	do.	$1,291	$1,440	$1,586
Finance, insurance, real estate	do.	$494	$542	$641
Services	do.	$1,908	$2,119	$2,351
Government and government enterprises	do.	$1,356	$1,457	$1,528
Construction activity:				
Number of private and public residential units authorized[3]		4,236	5,408	7,274
Value of nonresidential construction[3]	millions	$131.1	$154.2	$165.0
Value of State road contract awards	do.	$152.2	$128.5	$151.5
Shipments of portland and masonry cement to and within the State[4]	thousand short tons	202	169	205
Nonfuel mineral production value:				
Total crude mineral value	millions	$11.5	$12.2	$14.2
Value per capita		$12	$13	$15

[p]Preliminary. [r]Revised.
[1]Data may not add to totals shown because of independent rounding.
[2]Includes wages and salaries, proprietors' income, and other labor income; cannot be directly related to employment because of inclusion of proprietors' income.
[3]Construction Review, International Trade Administration, U.S. Department of Commerce, May-June 1987, pp. 26-27, 35-36.
[4]Highway and Heavy Construction Magazine, Jan. 1986, p. 32.

Sources: U.S. Department of Commerce, U.S. Department of Labor, Highway and Heavy Construction Magazine, and U.S. Bureau of Mines.

Legislation and Government Programs.—The State Geologist's Office, with funded support from the U.S. Geological Survey and the Connecticut Geological and Natural History Survey, began a surficial and bedrock mapping program. The mapping primarily focused on producing a revised State bedrock map consistent with Connecticut and Massachusetts maps. The State Geologist's Office also continued to be involved with the State Department of Environmental Management in areas of aquifer protection and landfill siting. In addition, localities with potentially high radon levels were identified for the State Department of Health as part of the U.S. Environmental Protection Agency-funded radon survey. A multiyear joint program with the Connecticut Survey and funded by the U.S. Minerals Management Service continued with seismic surveying of selected offshore areas that have potential for exploitation of nonfuel mineral resources.

The Rhode Island Office of State Planning, a division of the Department of Administration, continued revising its State Land Use Policies and Plan adopted in 1975. The primary purpose of the revision was to develop and update the existing land use plan and extend the planning horizon from 1990 to the year 2010. Topics to be addressed included air quality, water resources, acid rain, energy resources, and land surface features (topography, geology, minerals, earthquakes, and sea-level rise). Technical papers published during 1986 included ones on water resources, coastal resources, and transportation and land use.

In January, a public information booklet entitled "Siting High-Level Nuclear Waste Repositories: A Progress Report for Rhode Island" was published by the Office of State Planning. The report was the result of the Nuclear Waste Fund established by the Nuclear Waste Policy Act of 1982, which provided financial support to Rhode Island and 16 other States to participate in the U.S. Department of Energy's (DOE) high-level radioactive waste repository siting program. These 17 States were selected by virtue of their extensive granite deposits, which DOE considered a suitable medium for housing the repository.

The New England-New York Water Council of the New England Governor's Conference prepared an "Action Plan for Water Management" in the seven-State region, which included Rhode Island. Policies and recommendations were designed to achieve regional objectives in toxic substances, acid rain, and ground water resources. The plan was adopted by all the States.

REVIEW BY NONFUEL MINERAL COMMODITIES

INDUSTRIAL MINERALS

Sand and Gravel.—*Construction.*—Construction sand and gravel production is surveyed by the U.S. Bureau of Mines for even-numbered years only; this chapter contains actual data for 1984 and 1986 and estimates for 1985. Data for odd-numbered years are based on annual company estimates.

Output and value of construction sand and gravel, the State's leading mineral commodity, increased substantially compared with 1985 estimates. It was produced by 14 companies at 16 pits in 3 counties. Leading counties in order of output were Kent, Providence, and Washington. The product was used principally for concrete aggregate, asphaltic concrete aggregates, road base and coverings, and fill.

Table 4.—Rhode Island: Construction sand and gravel sold or used in 1986, by major use category

Use	Quantity (thousand short tons)	Value (thousands)	Value per ton
Concrete aggregates (including concrete sand)	569	$2,262	$3.98
Asphaltic concrete aggregates and other bituminous mixtures	W	W	5.35
Road base and coverings	W	W	1.08
Fill	52	66	1.27
Railroad ballast	11	47	4.27
Other unspecified[1]	1,637	5,876	3.59
Total or average	2,269	[2]8,252	3.64

W Withheld to avoid disclosing individual company proprietary data; included with "Other unspecified."
[1]Includes production reported without a breakdown by end use, estimates for nonrespondents, and data indicated by symbol W.
[2]Data do not add to total shown because of independent rounding.

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Industrial.—Holliston Sand Co. was the only industrial sand producer in 1986. The company operated a pit in Slatersville, Providence County.

Stone (Crushed).—Stone production is surveyed by the U.S. Bureau of Mines for odd-numbered years only; this chapter contains estimates for 1984 and 1986 and actual data for 1985. Data for even-numbered years are based on annual company estimates.

Estimated crushed stone produced totaled 1 million short tons valued at $5.7 million, a 12% decrease in quantity and a 19% decrease in value. In 1985, four companies operated quarries in Providence County and one operated in Newport County. Both granite and limestone were produced.

[1]State Mineral Officer, Bureau of Mines, Pittsburgh, PA.

Table 5.—Principal producers

Commodity and company	Address	Type of activity	County
Sand and gravel:			
A. Cardi Construction Co. Inc	451 Arnold Rd. Coventry, RI 02816	Pits and plant	Kent.
Holliston Sand Co.[1]	Box 393 Slatersville, RI 02876	Pit and plant	Providence.
River Sand & Gravel Co. Inc	101 Ferris St. Pawtucket, RI 02861	Pit	Kent.
South County Sand & Gravel Co.	North Rd. Peace Dale, RI 02878	Pit and plant	Washington.
TASCA Sand & Gravel Co.	Box 123 R.F.D. 4 Smithfield, RI 02917	Pit	Providence.
Stone (1985):			
Forte Bros. Inc	14 Whipple St. Berkley, RI 02864	Quarry	Do.
J. H. Lynch & Sons Inc.[2]	825 Mendon Rd. Cumberland, RI 02864	do	Do.
Tilcon Inc	875 Phoenix Ave. Cranston, RI 02920	do	Do.

[1]Also industrial sand.
[2]Also sand and gravel.

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